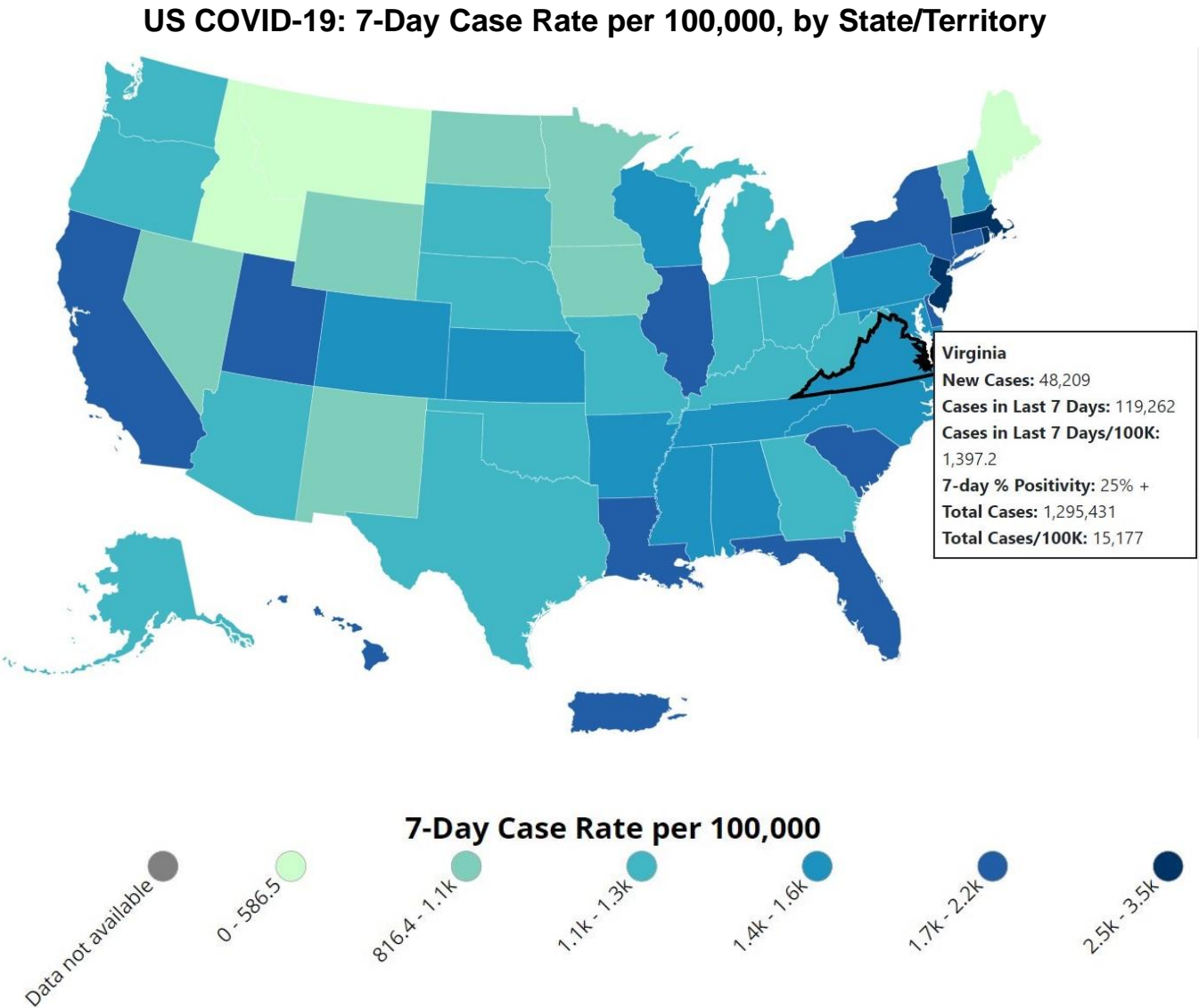

Virginia COVID-19 Surveillance Data Update

January 12, 2022





	Cases in the Last 7 Days Per 100k Population
Virginia	1,397.2 (+19.8%)
U.S.	1,583.5 (+35.3%)
Rhode Island	3,459.4 (+62.6%)
New York City*	3,270.1 (+0.46%)
New York	2,131.7 (+18.6%)
New Jersey	2,498.2 (+8.0%)

Our Neighbors

Rates Higher than Virginia

District of Columbia, **1,812.4 (-13.9%)**
North Carolina, **1,477.8 (+50.0%)**
Tennessee, **1,409.5 (+28.4%)**

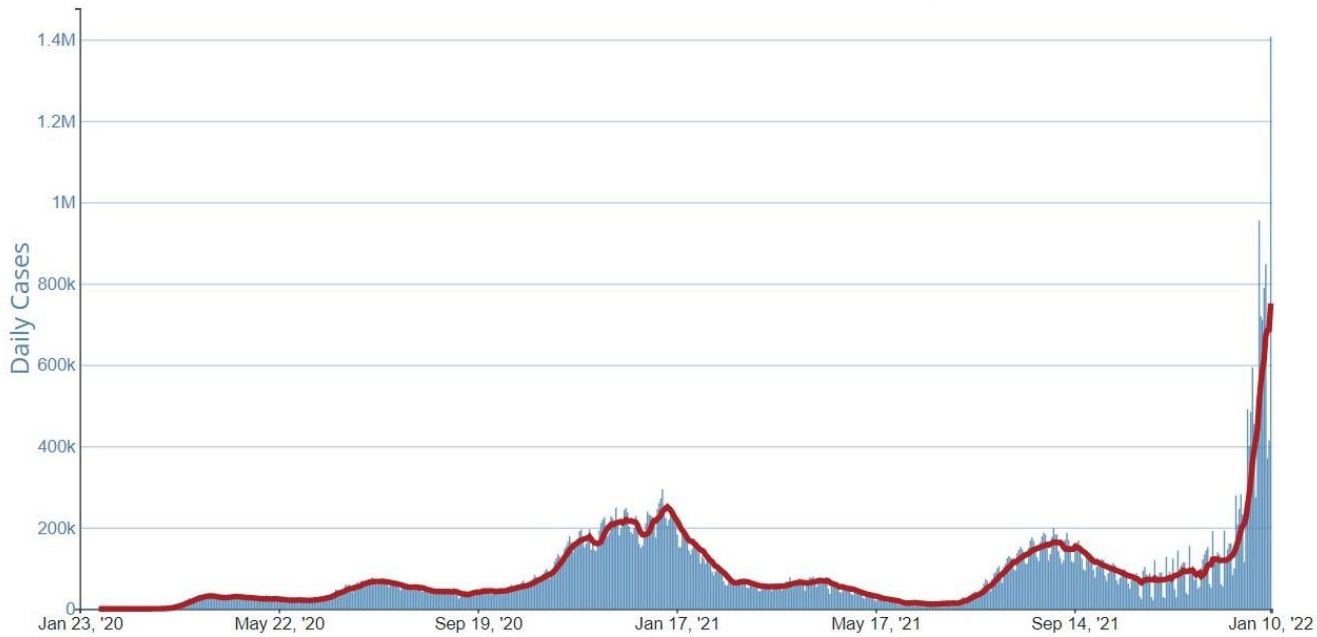
Rates Lower than Virginia:

Maryland, **1,395.6 (-6.3%)**
West Virginia, **1,280.2 (+42.1%)**
Kentucky, **1,188.2 (+55.1%)**

National: Cases, Hospitalizations, and Deaths

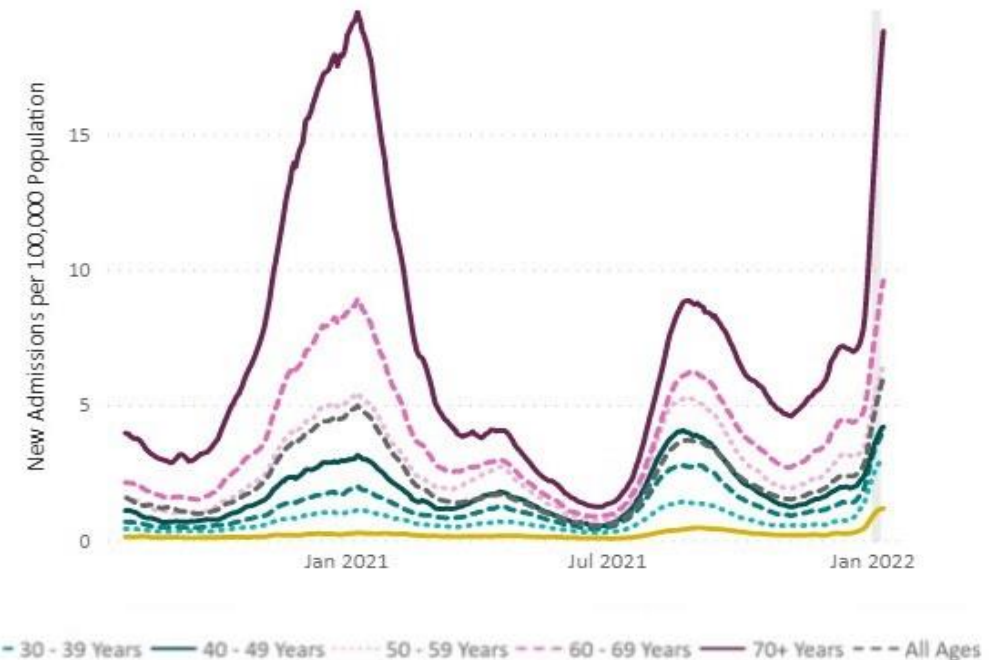
Updated 1/12/22

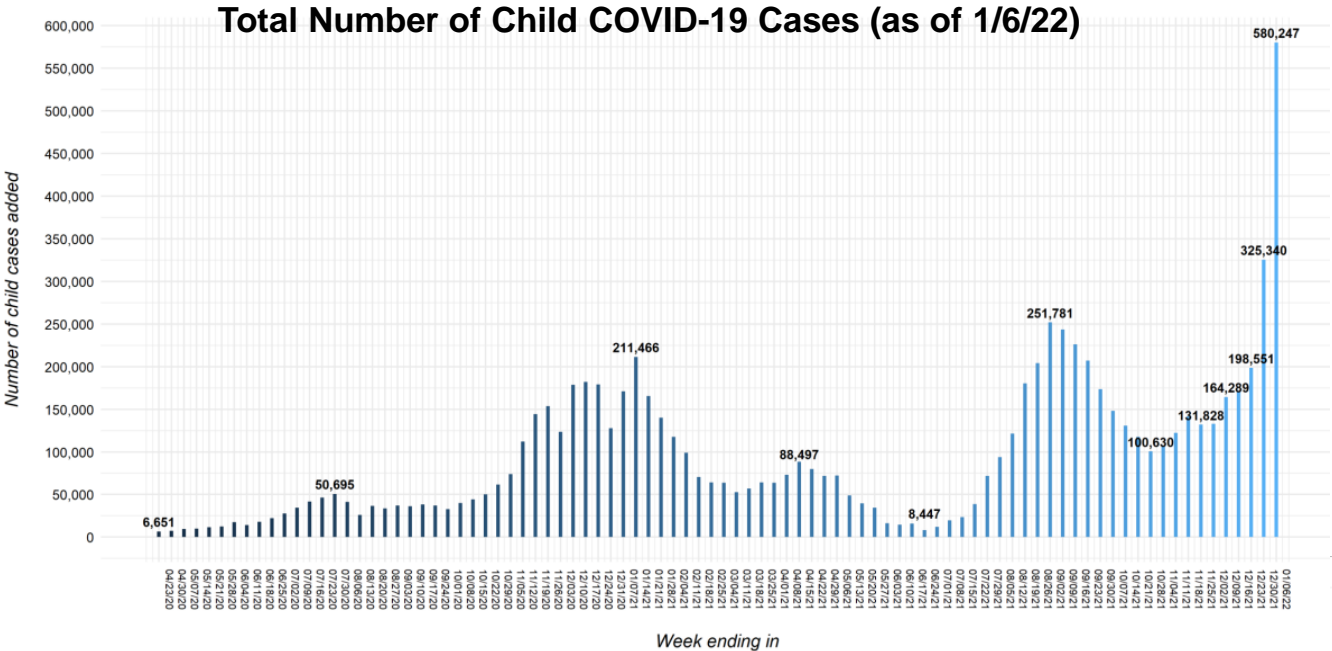
Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC



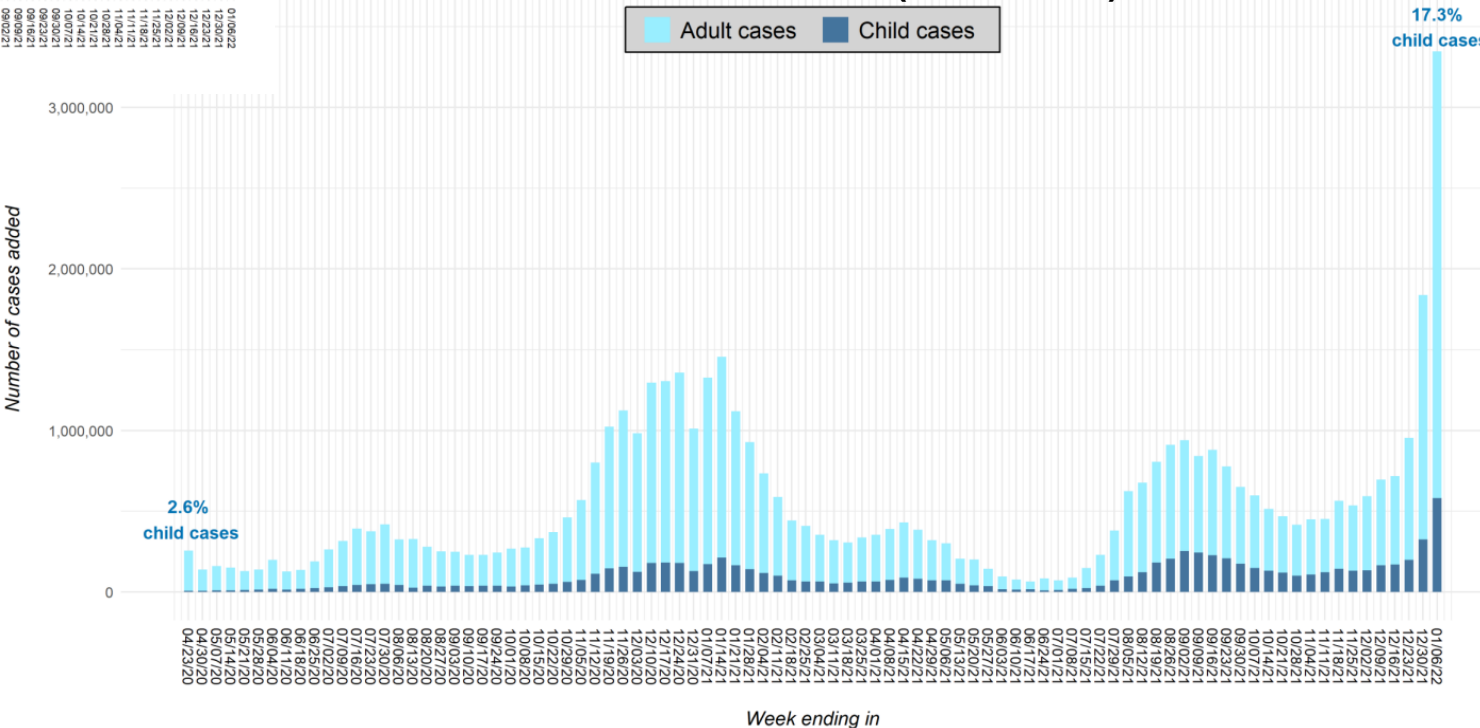
- Compared to last week, **cases** increased to 750,996 (7-day MA) per day (+47%)
 - 200% higher than the January peak of 2021
 - 357% higher than the September high of 2021
 - **Hospitalizations** increased to 19,768 (7-day MA) per day (+32.5%)
- **Deaths** increased to 1,633 (7-day MA) per day (+40%)

United States | All Age Groups





Total Number of Children and Adult COVID-19 Cases (as of 1/6/22)

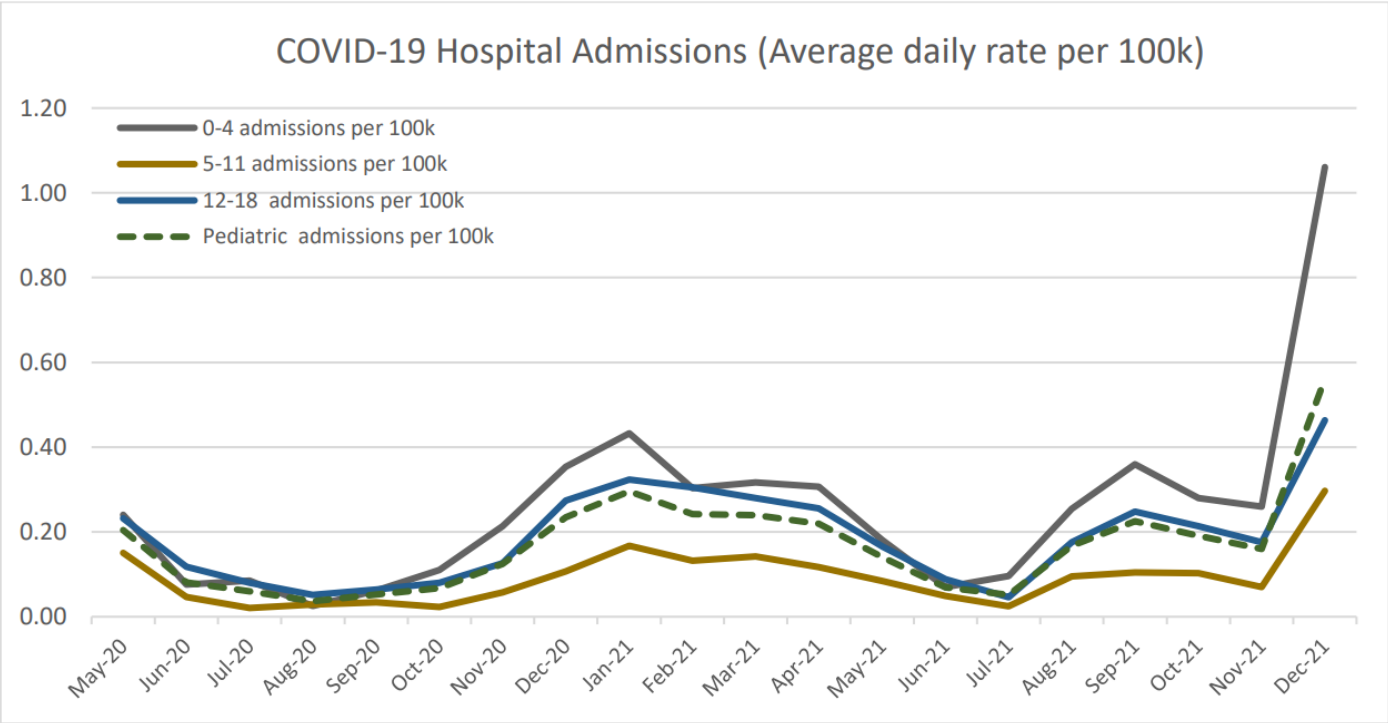




New York State released report based on data from Dec 5th - Jan 1st among children 0-18.
Major Findings included:

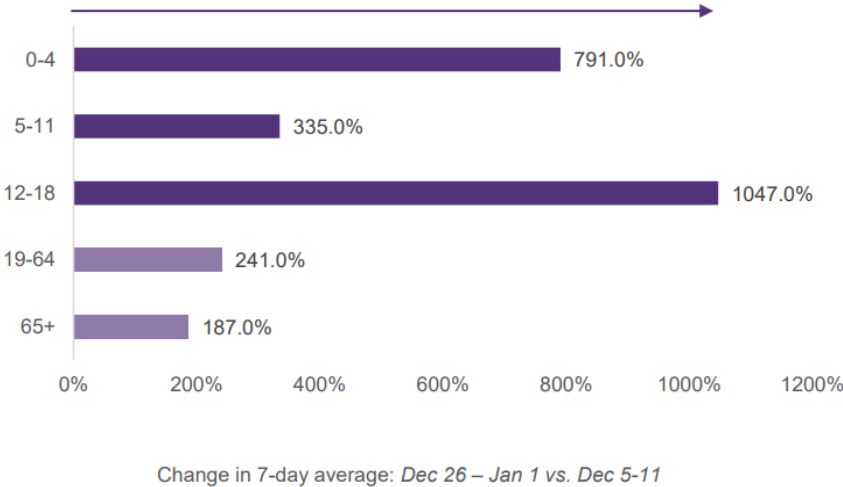
- Hospital admissions for or with COVID-19 among people aged ≤ 18 years **increased more than 7-fold** statewide
- **Seven out of ten children** across New York State who contracted COVID-19 and were hospitalized were **symptomatic** and 54% had no comorbidities

0-18 Years, Hospital Admissions



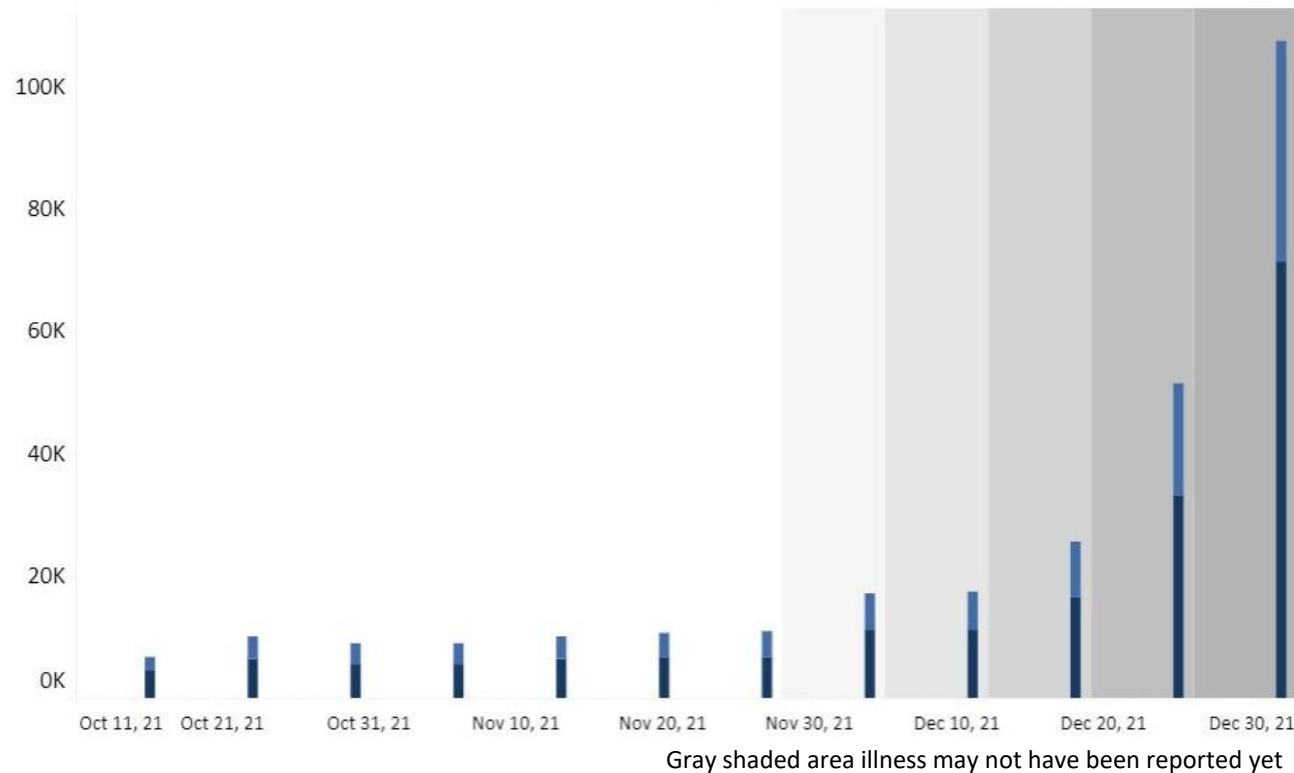
Source: [Full Report - Pediatric COVID-19 update: January 7, 2022 \(ny.gov\)](#)

SINCE DEC. 5 – 11, RAPID INCREASES IN HOSPITALIZATIONS AMONG THOSE 0-18 YEARS



Source: HERDS New COVID-19 hospital admissions by age group and week, Jan. 4 Pediatrics report (Table 2)

Cases by Date of Symptom Onset, Past 13 weeks

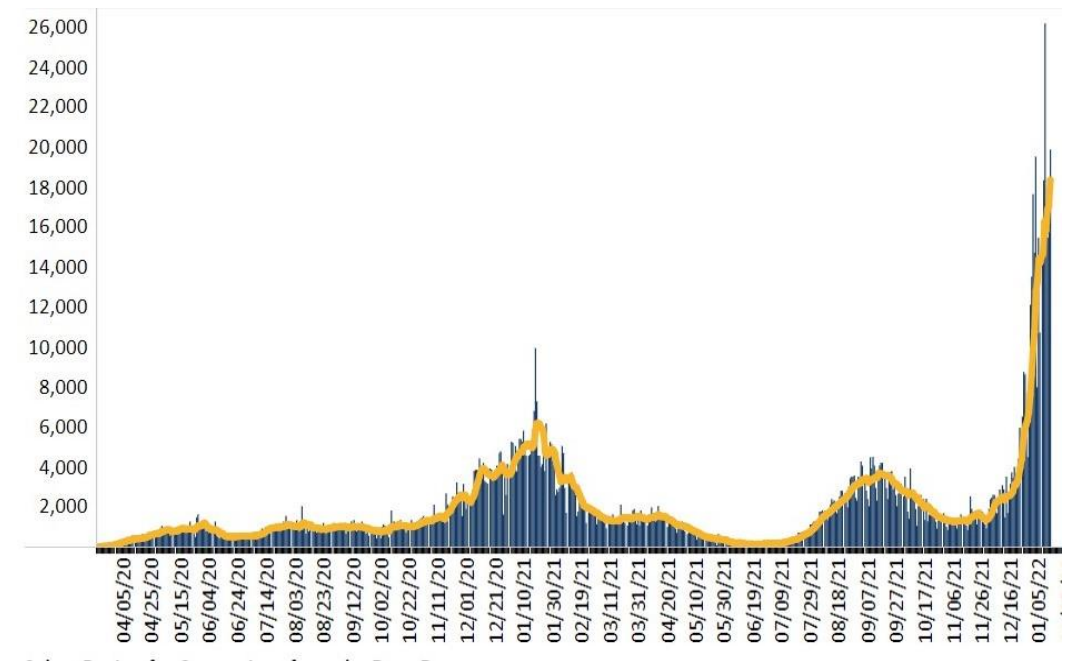


Compared to last week, **cases increased** to 18,338 (7-day MA) from 14,212 per day (+29%)

- 197% higher than the January peak of 2021
- 397% higher than the September high of 2021

- **Hospitalizations** increased to 3,554 per day (+43%)
- ***Deaths** increased to 17 confirmed deaths last week (+32%)

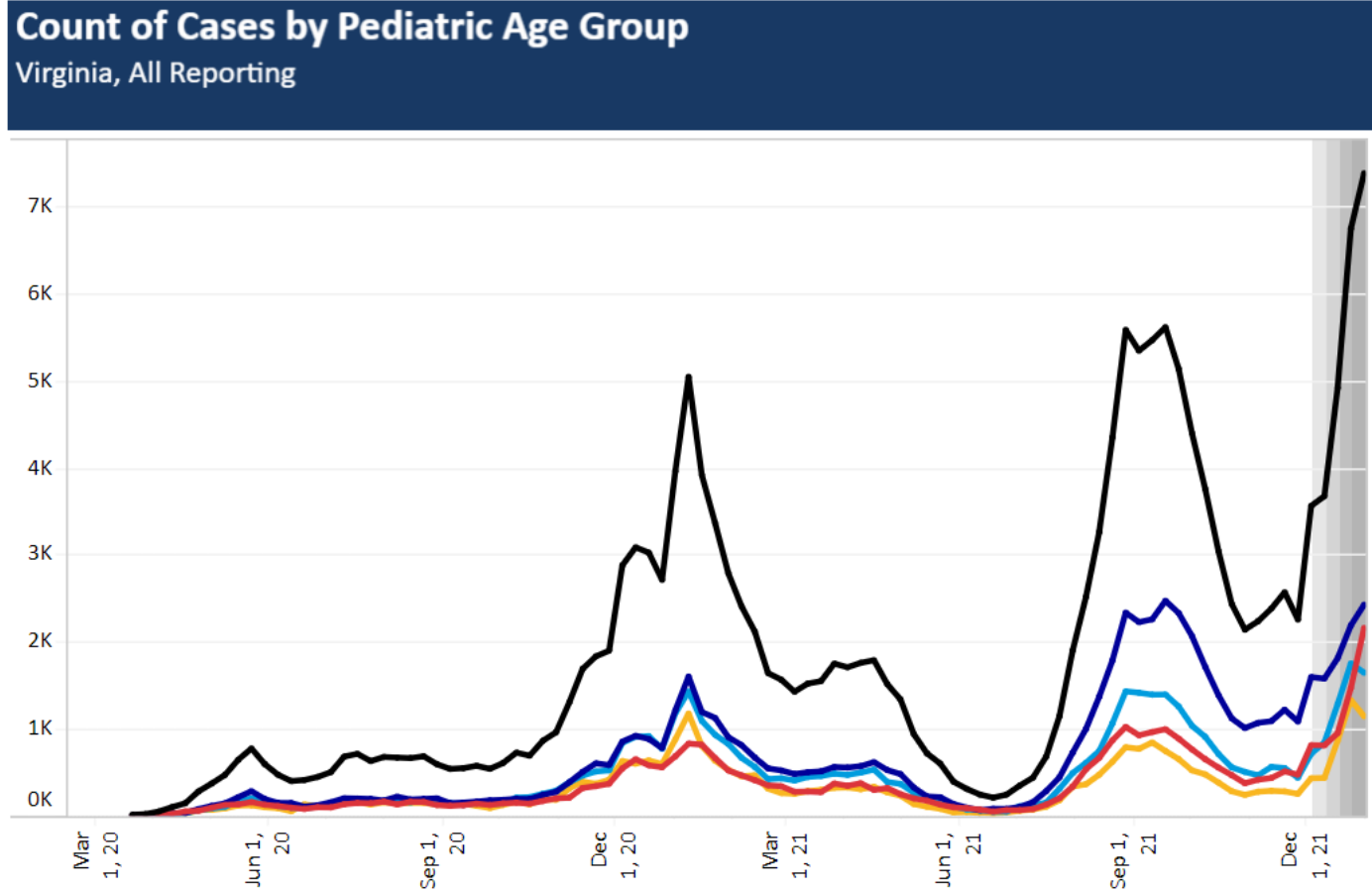
Cases by Date Reported, All Reporting Timeline



*VDH received cumulative death data on 12/28 totaling 185 deaths

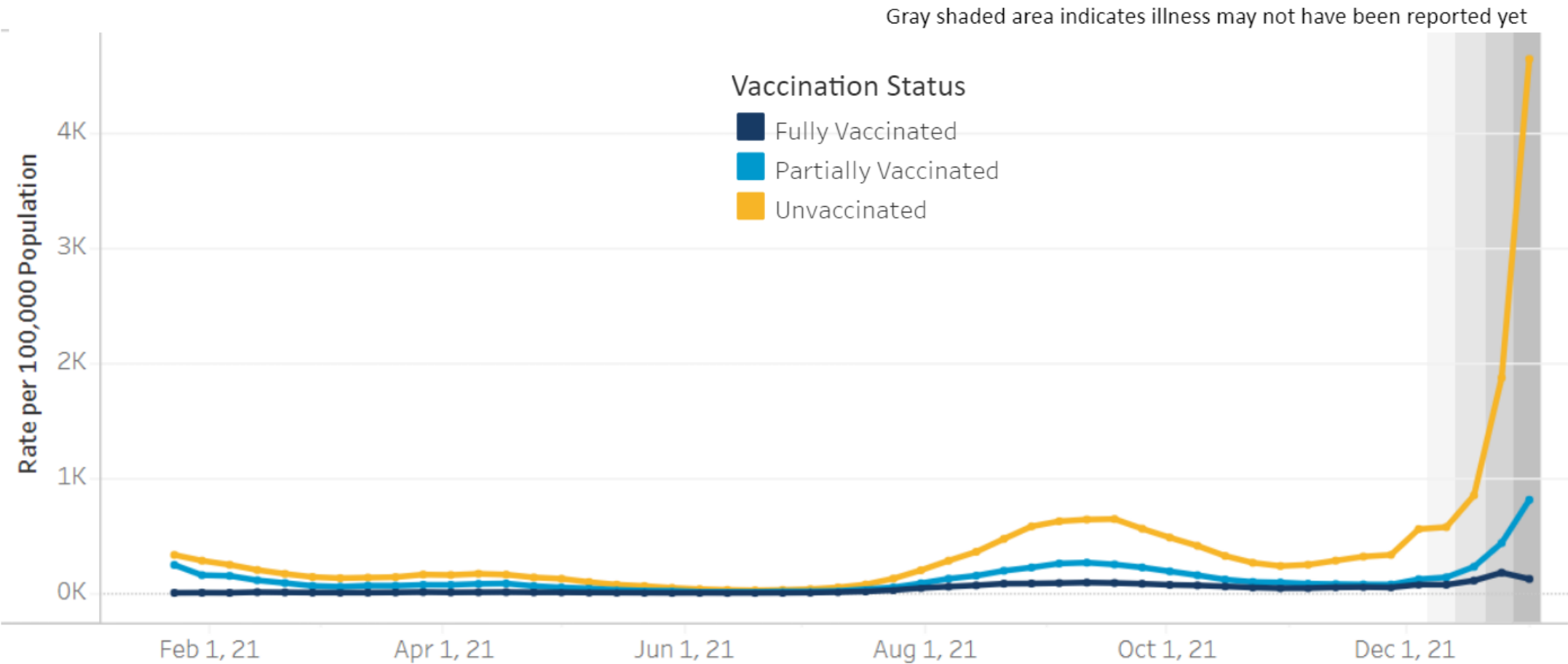
Source: [Cases – Coronavirus \(virginia.gov\)](https://www.virginia.gov/coronavirus/cases), [Cases and Deaths - Coronavirus \(virginia.gov\)](https://www.virginia.gov/coronavirus/cases-and-deaths), [VHHA Hospitalizations – Coronavirus \(virginia.gov\)](https://www.vhha.virginia.gov/coronavirus/hospitalizations), Data represent a 7-day moving average

	Cases	Hospitalizations	Deaths
All Reporting: (3/15/2020 - 1/1/2022)	173,032	927	12
For Most Recent Two Week Period: (12/18/2021 - 1/1/2022)	7,230	34	1

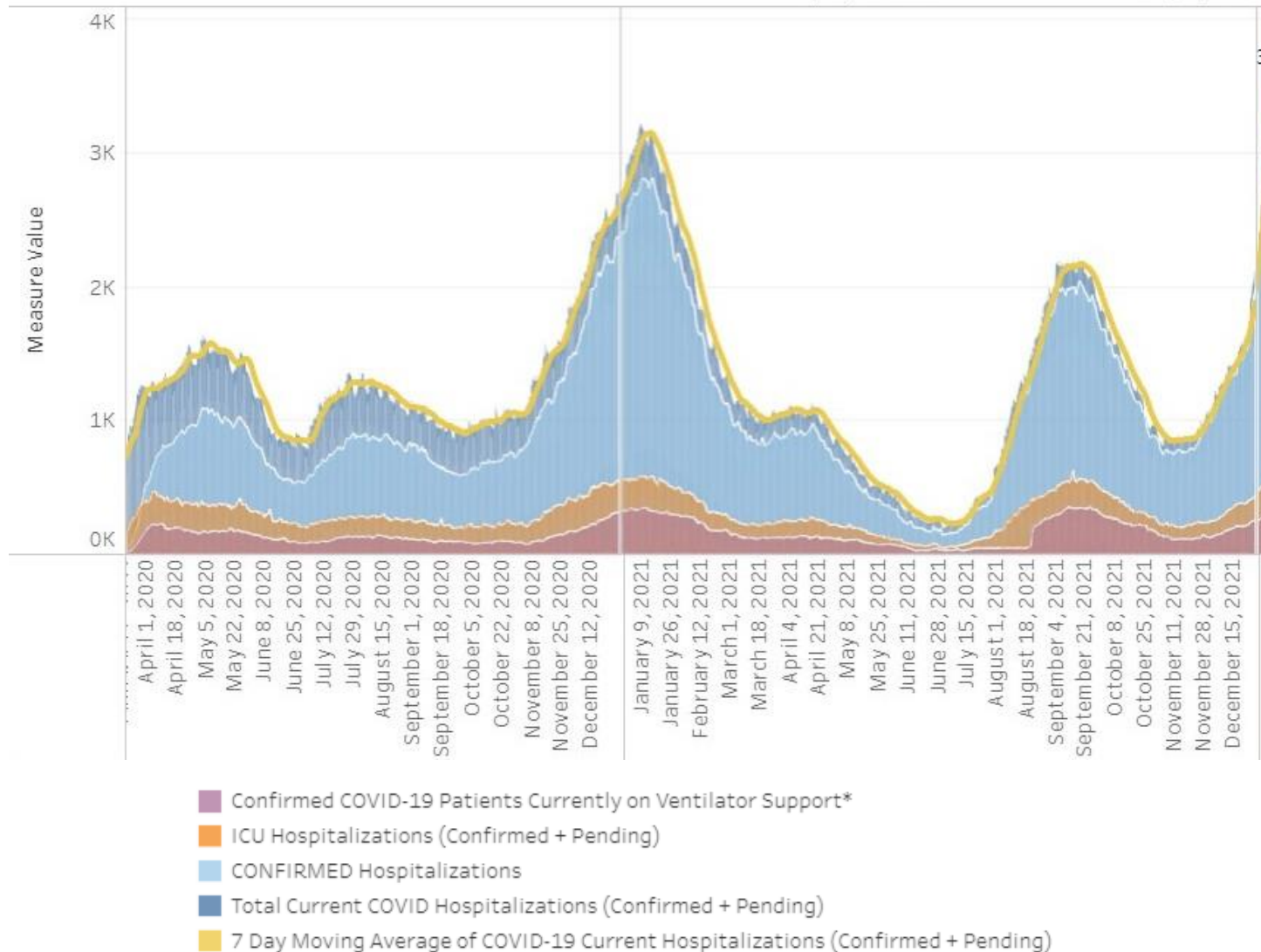


- Age Group
- 0-4 Years
 - 5-11 Years
 - 12-15 Years
 - 16-17 Years
 - 0-17 Years

Between 1/17/2021 and 1/1/2022, unvaccinated people developed COVID-19 at a rate **4.3 time** that of fully vaccinated people and **2.2 times** that of partially vaccinated people.‡



COVID-19 in Virginia Hospitals



Compared to last week hospitalizations **increased to 3,554** (7-day MA) from 1,650 (+43%)

- 64% higher than the September high of 2021

Compared to last week. ICU hospitalizations have **increased to 621** from 499 (+24%)

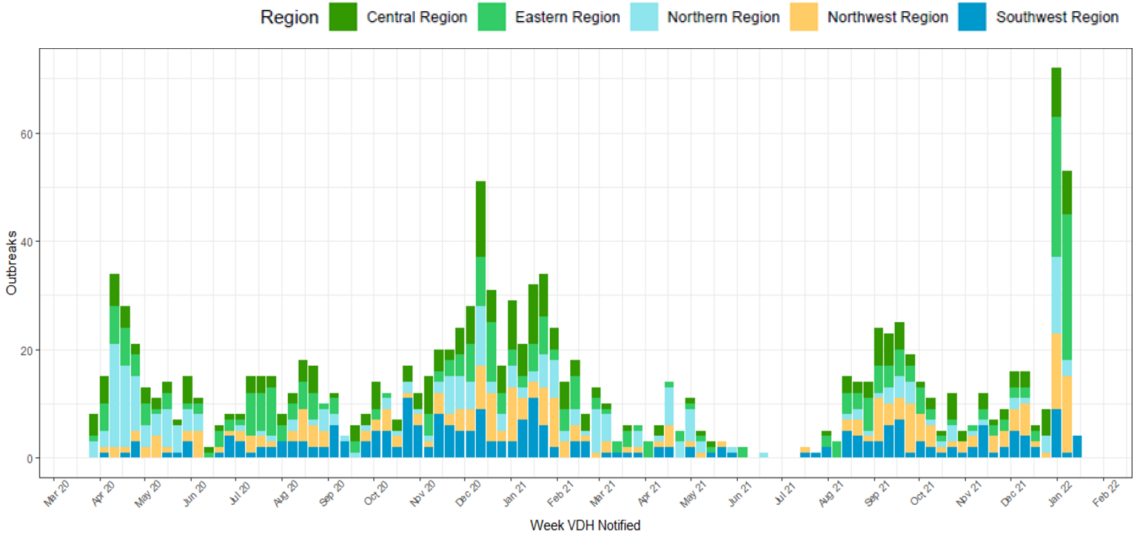
345 patients are currently on ventilator support (+23%)

- 2% lower than the September high of 2021

Key Trends

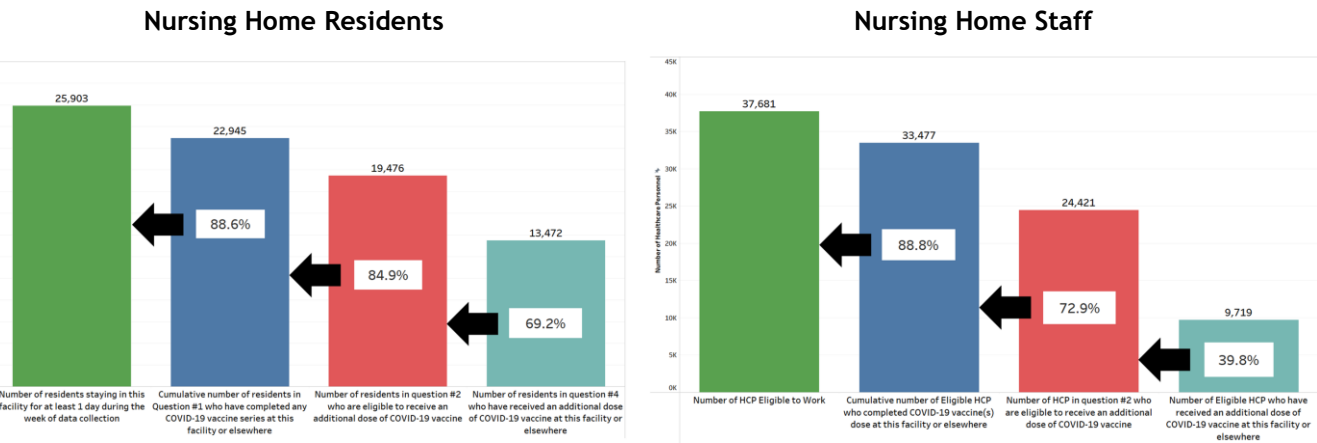
- There were **154 LTCF COVID-19 outbreaks reported in the past 30 days**: 57 in Eastern, 36 in Northwest, 24 in Central, 21 in Northern, and 16 in Southwest (see figure top right).
- The number of reported resident and staff cases have dramatically increased in the past few weeks (see figure bottom right).
 - For the reporting week ending January 9, 2022, **845 resident and 1,309 staff cases** were reported to NHSN. Data for this reporting week are preliminary.
 - This is the highest number of resident cases reported during a week since January 2021 and the highest number of staff cases reported since nursing homes began reporting to NHSN.
- For reporting week ending January 2, 2022, data reported from 282 nursing homes showed **89% of residents were fully vaccinated**; data reported from 281 nursing homes showed **89% of staff were fully vaccinated** (see figures bottom left).
 - Of the 19,476 residents eligible to receive an additional dose or booster, 13,472 (69%) have received an additional dose or booster of COVID-19 vaccine.
 - Of the 24,421 healthcare personnel eligible to receive an additional dose or booster, 9,719 (40%) have received an additional dose or booster of COVID-19 vaccine.

Number and Region of LTCF COVID-19 Outbreaks by Date VDH Notified



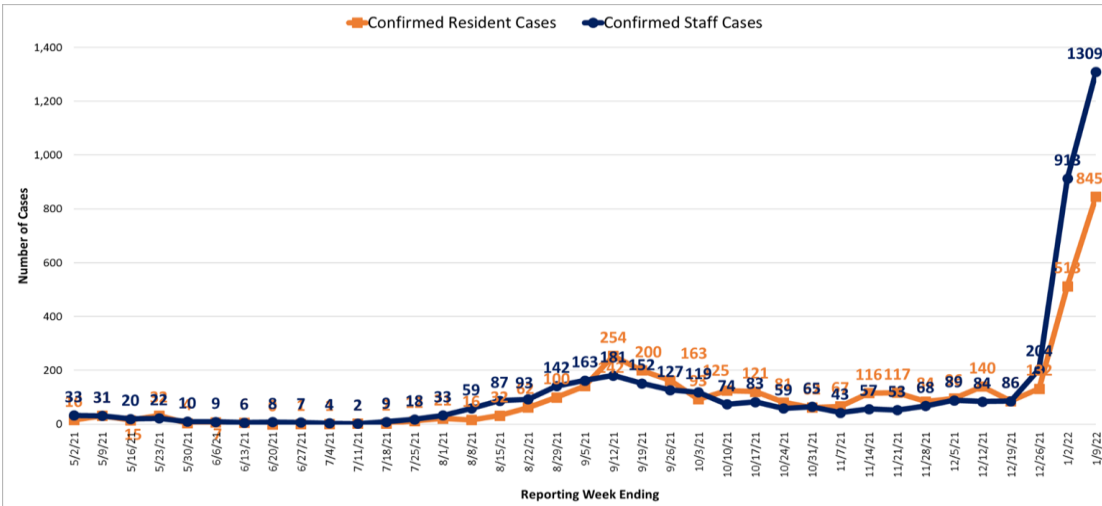
Outbreaks reported from nursing homes, assisted living facilities, and multicare facilities to VDH with a confirmed or suspected etiologic agent of SARS-CoV-2. Data are from the Virginia Outbreak Surveillance System as of 1/10/2022 and are subject to change. Please note that five SW outbreaks had been reported for the current week (week beginning 1/9/22) at the time of the data pull.

COVID-19 Booster Vaccination in Virginia Nursing Homes (n=286)



Data are from the National Healthcare Safety Network (NHSN) as of 1/11/2022 and are subject to change, including booster eligibility per [updated vaccine guidance](#). In Virginia, 282 nursing homes reported resident vaccination data for reporting week ending 1/2/2022; 281 nursing homes reported staff vaccination data for reporting week ending 1/2/2022. For staff type definitions, refer to [NHSN Table of Instructions](#).

Nursing Home Resident and Staff COVID-19 Cases



Data are from NHSN as of 1/11/2022 and are subject to change. For reporting information, please refer to the NHSN data collection forms: [residents](#), [staff](#).

Metrics date: 1/9/2022

New cases per 100k within the last 7 days

% Positivity 7-day moving average

COVID-like ED visits rate per 100k

Central

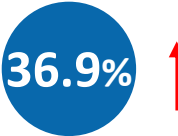
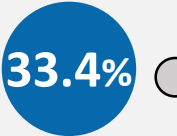
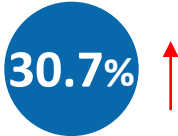
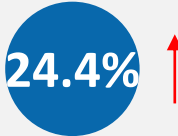
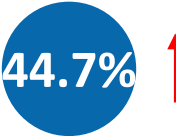
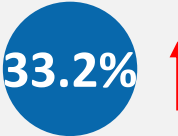
Eastern

Far Southwest

Near Southwest

Northern

Northwest



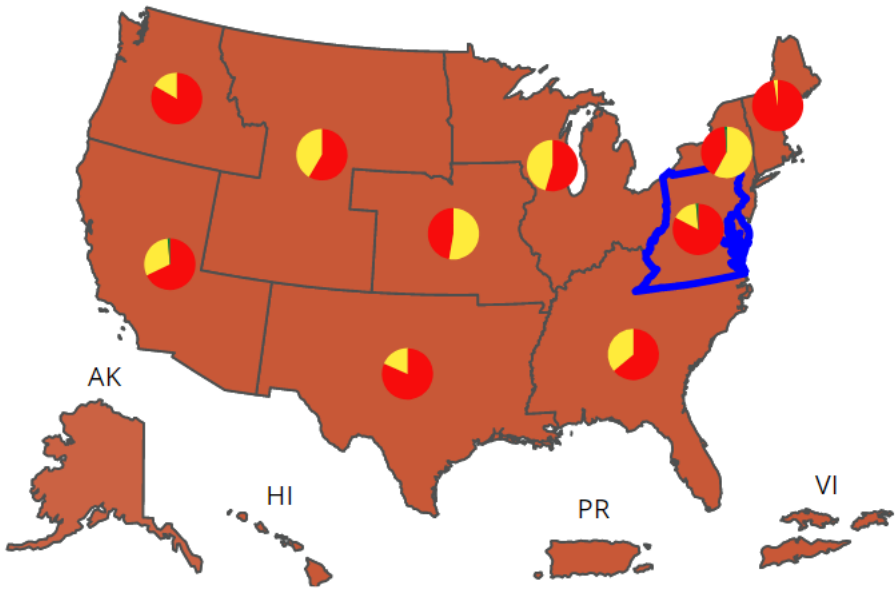
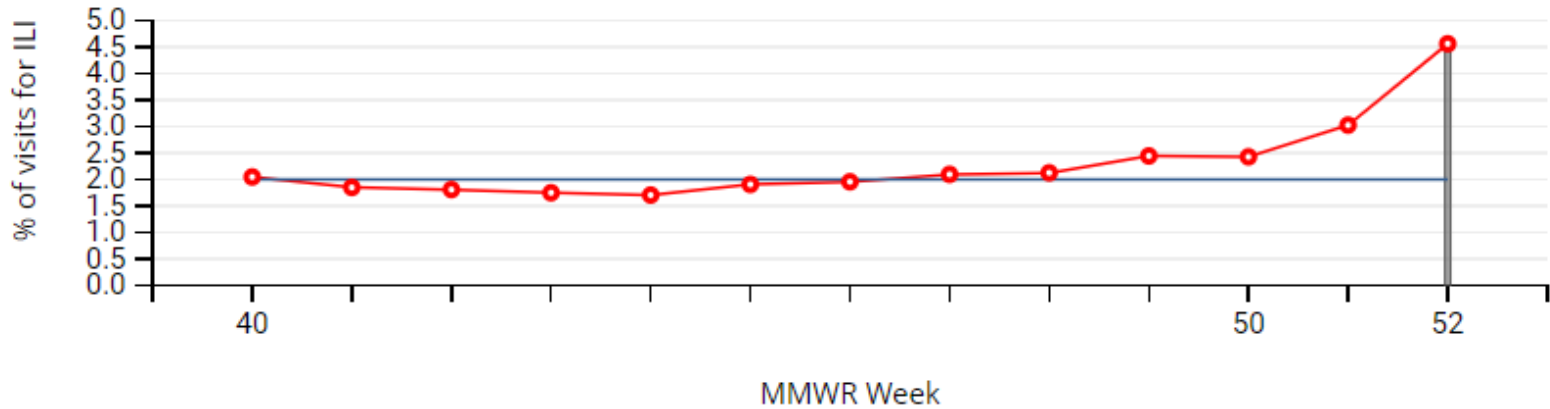
Burden	Level 0	Level 1	Level 2	Level 3	Level 4
New Cases	<10	10-49		50-100	>100
% Positivity	<3	3-5	5-8	8-10	>10
CLI ED Visits	<4		4-5.9		≥6

Symbol	Trend
↑	Increasing
↓	Decreasing
○	Fluctuating

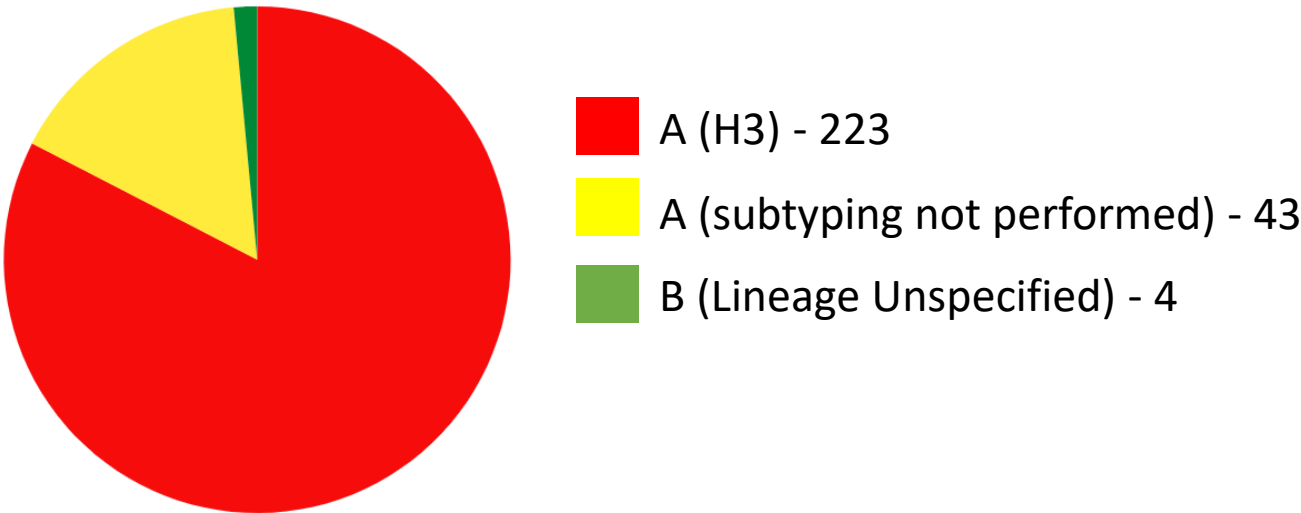
Please note: the methods used this week have changed slightly; data is now compared from Sunday to Sunday instead of Wednesday to Wednesday

- ✓ — Percent Weighted ILI
- ✓ — Regional Baseline

Region 3 Percentage of Visits for ILI (ending 1/1)



Region 3 Influenza Positive Tests from most recent 3 weeks (ending 1/11)



Coinfection by Severe Acute Respiratory Syndrome Coronavirus 2 and Influenza A(H1N1)pdm09 Virus Enhances the Severity of Pneumonia in Golden Syrian Hamsters: November 20, 2020

A clinical study in hamsters observing the interaction between the co-circulating COVID-19 and seasonal Influenza.

- Simultaneous or sequential coinfection by COVID-19 and influenza caused more severe disease than monoinfection by either virus in hamsters.
- Coinfected hamsters had more weight loss, more severe lung damage, body tissue inflammation, and intestinal inflammation.
- Simultaneous coinfection was associated with delay in resolution of lung damage, lower COVID-19 neutralizing antibody, and longer COVID-19 shedding in oral swabs compared to that of COVID-19 monoinfection.

COVID-19 and Influenza Co-infection: A Systematic Review and Meta-Analysis: June 25, 2021

A systematic review and meta-analysis study analyzed the rate of coinfection of COVID-19 and Flu from Mar-Sept 2020, eleven prevalence studies with total of 3,070 patients with COVID-19, and 79 patients with concurrent COVID-19 and influenza were selected for evaluation

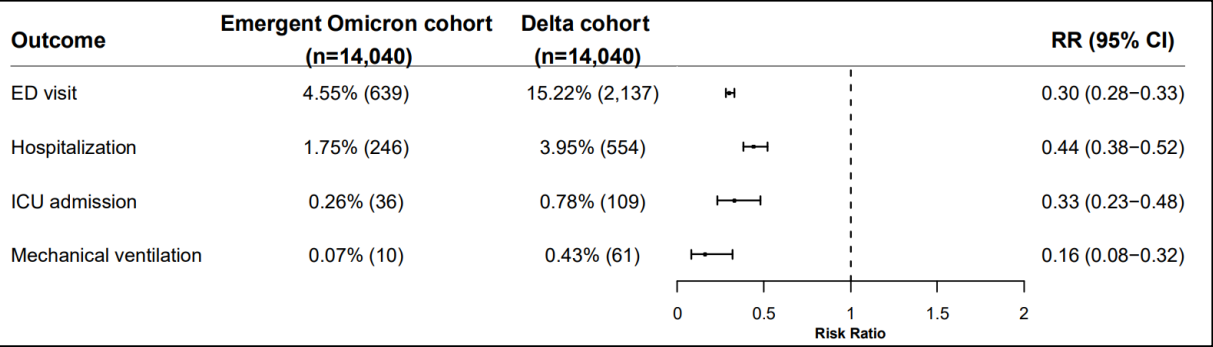
- The prevalence of influenza infection was 0.8% in patients with confirmed COVID-19.
- Fever, cough, and shortness of breath were the most common clinical manifestations reported for COVID-19 and Flu coinfection.
- Further breakdown: eight case reports and seven case series with a total of 123 patients with COVID-19 were selected where 29 patients had coinfection with influenza viruses A/B. Within this sample 2 patients died (6.9%), and 17 out of 29 patients recovered (58.6%)

Comparison of Outcomes from COVID Infection in Pediatric and Adult Patients Before and After the Emergence of Omicron: January 2, 2022

A retrospective cohort study comparing severity of patient outcomes (ED visit, hospitalization, ICU admission, and mechanical ventilation) in early Omicron (12/15/21-12/24/21) and Delta (9/1/21-11/15/21) waves within their first 3 days of infection:

- SARS-CoV-2 infections during early Omicron phase were associated with significantly less severe outcomes than first-time infections when the Delta variant predominated (see tables below)

Comparison of 3 day Outcomes in Omicron and Delta Cohorts (Across Ages)



Age Stratified Comparison of 3 day Outcomes in Omicron and Delta Cohorts

